## **Behavioral and Social Research Program**

**Research Project Grants** 

Award Mechanisms for Research Project Grants includes the following:

- P01 Research Program Project
- R01 Research Project (Traditional)
- R03 Small Research Grant
- R15 Academic Research Enhancement Award (AREA)
- R21 Planning Grant
- R37 Method to Extend Research in Time (MERIT) Award
- R55 Shannon Award
- U01 Cooperative Agreement Research Project Award

## **BUT THIS FILE ONLY CONTAINS U01s**

**Grant:** 2U01AG014289-06A1

**Program Director:** ELIAS, JEFFREY W.

Principal Investigator: BALL, KARLENE K PHD

Title: ACTIVE Phase II: UAB Field Site

Institution: UNIVERSITY OF ALABAMA AT BIRMINGHAM BIRMINGHAM, AL

**Project Period:** 1996/09/30-2005/12/31

DESCRIPTION (provided by applicant): This application is a renewal of the application rifled "ACTIVE Phase II: UAB Field Site". This application is for the Field Site at the University of Alabama at Birmingham. Phase I of ACTIVE (Advanced Cognitive Training for Independent and Vital Elderly) was a randomized controlled trial of three cognitive intervention arms, addressing the question of whether improving basic cognition aided in maintaining functional independence in elders. As to be reported in JAMA (11/12/02), Phase I found strong, broad and durable cognitive ability-specific training effects. The effect sizes were comparable to or greater than the amount of cognitive decline observed in other longitudinal studies, suggesting that the interventions have the potential to reverse age-related decline. There was minimal transfer of training effects to everyday activities (i.e., functional competence). However, it should be noted that through the two year followup, there was no evidence of a significant decline in ADL and IADL status. Therefore, to adequately understand the cognitive transfer effects of the training interventions, a longer followup period is required, particularly to see whether there is a separation of the change trajectories for everyday activities of trained and untrained participants over time. Phase II of ACTIVE is proposed as a followup study focused on measuring the long-term impact of training effects on cognitive function and cognitively demanding everyday activities. The Phase II followup will consist of one assessment to include the Phase I post-test battery and a clinical assessment. The ACTIVE cohort (n = 2832) is a special sample, containing substantial oversampling of African American, socioeconomically poor, and very old adults. The Specific Aims of Phase II of ACTIVE are: 1) to determine whether the cognitive interventions (as initial treatment or as a consequence of repeated boosters) have long-term protective effects on functional outcomes; 2) to document any delayed transfer of the cognitive training to secondary outcomes; and 3) to identify individual factors that affect response to intervention. As in Phase I, the primary analytical approach to detecting treatment effects on both cognitive and functional abilities will be a repeated-measures, mixed-effects model incorporating all design features as fixed effects and individual-level variability as random effects. Other multivariate analyses including lagged and cross-lagged analyses of change using latent change analysis, structural equation modeling, and growth curve analyses will also be used as appropriate to characterize relationships between individual difference factors and change in functional competence. Retention is projected conservatively at 72% with 65% of the cohort providing full data and another 7% providing partial data at year 5. Power analysis shows that extending the study will make it possible to observe effect sizes on the order of 0.05-0.10 with excellent power, in the range of at least 80-90%.

**Grant:** 5U01AG013313-08

**Program Director:** STAHL, SIDNEY M.

Principal Investigator: BURNS, ROBERT MD

Title: Multisite Intervention Trial for Diverse Caregivers

Institution: UNIVERSITY OF TENNESSEE HEALTH SCI CTR MEMPHIS, TN

**Project Period:** 1995/09/15-2004/08/31

DESCRIPTION (provided by applicant): The objective of this proposal is to refine and test a multicomponent psychosocial behavioral intervention to reduce burden and depression among family caregivers of persons with Alzheimer?s Disease or related disorders. This competing renewal will build on existing infrastructures and results obtained from its parent multi-site feasibility study, Resources for Enhancing Alzheimer?s Caregiver Health (REACH). REACH, (funded by the National Institute on Aging (NIA) and the National Institute for Nursing Research (NINR) U01-AG13305) explored the effectiveness of different interventions to reduce burden and distress of family caregivers in six participating sites. Detailed analyses of these data suggest specific components of the REACH interventions that may be efficacious in improving care-giver outcomes. The current study integrates identified components from the REACH interventions and tests a single multi-component intervention. This intervention will be evaluated among a sample of geographically and racially/ethnically diverse care-giver populations. The study design is a multi-site, twogroup randomized clinical trial. The same two conditions: an in-home multi-component intervention or a standardized information only control condition will be implemented at five sites (Birmingham, Memphis, Miami, Palo Alto, and Philadelphia), with the Coordinating Center in Pittsburgh. Recruitment of 600 (120 per site) caregiver-care recipient dyads will yield 510 completing the protocol (15% attrition expected). Equal numbers of African Americans/Blacks, Hispanics/Latinos, and Caucasian/Whites will be recruited and assigned to each condition at each site. Phase 1 involves a refinement of the intervention and training of the interventionists across sites; in Phase 2, the randomized clinical trial will be conducted. The intervention is designed to enable care-givers to earn and use cognitive and behavioral strategies, to impact both care recipient behaviors (e.g., wandering) and their own behaviors (e.g., managing stress). The intervention will consist of 10 home visits by trained staff plus 5 preplanned contacts with trained staff through innovative technology over a six-month period. The technology will also provide access to formal services, family, and other care-givers. A uniform battery of predictor and outcome measures will be collected at baseline, three and six months. Cost effectiveness and clinical significance of the two conditions will also be evaluated.

**Grant:** 5U01AG020274-03

**Program Director:** STAHL, SIDNEY M.

**Principal Investigator:** CZAJA, SARA J. PHD HUMAN FACTORS

**ENGINEERING** 

Title: MULTI-SITE INTERVENTION FOR DIVERSE CAREGIVERS

Institution: UNIVERSITY OF MIAMI-MEDICAL Coral Gables, FL

**Project Period:** 2001/09/30-2004/08/31

DESCRIPTION (provided by applicant): The objective of this proposal is to refine and test a multicomponent psychosocial behavioral intervention to reduce burden and depression among family caregivers of persons with Alzheimer?s Disease or related disorders. This competing renewal will build on existing infrastructures and results obtained from its parent multi-site feasibility study, Resources for Enhancing Alzheimer?s Caregiver Health (REACH). REACH, (funded by the National Institute on Aging (NIA) and the National Institute for Nursing Research (NINR) U01-AG13305) explored the effectiveness of different interventions to reduce burden and distress of family caregivers in six participating sites. Detailed analyses of these data suggest specific components of the REACH interventions that may be efficacious in improving caregiver outcomes. The current study integrates identified components from the REACH interventions and tests a single multi-component intervention. This intervention will be evaluated among a sample of geographically and racially/ethnically diverse caregiver populations. The study design is a multi-site, twogroup randomized clinical trial. The same two conditions: an in-home multi-component intervention or a standardized information only control condition will be implemented at five sites (Birmingham, Memphis, Miami, Palo Alto, and Philadelphia), with the Coordinating Center in Pittsburgh. Recruitment of 600 (120 per site) caregiver-care recipient dyads will yield 510 completing the protocol (15% attrition expected). Equal numbers of African Americans/Blacks, Hispanics/Latinos, and Caucasian/Whites will be recruited and assigned to each condition at each site. Phase 1 involves a refinement of the intervention and training of the interventionists across sites; in Phase 2, the randomized clinical trial will be conducted. The intervention is designed to enable caregivers to earn and use cognitive and behavioral strategies, to impact both care recipient behaviors (e.g., wandering) and their own behaviors (e.g., managing stress). The intervention will consist of 10 home visits by trained staff plus 5 preplanned contacts with trained staff through innovative technology over a six-month period. The technology will also provide access to formal services, family, and other caregivers. A uniform battery of predictor and outcome measures will be collected at baseline, three and six months. Cost effectiveness and clinical significance of the two conditions will also be evaluated.

**Grant:** 5U01AG013289-08

**Program Director:** STAHL, SIDNEY M.

Principal Investigator: GALLAGHER-THOMPSON, DOLORES E PHD

**Title:** Multisite Intervention Trial for Diverse Caregivers.

Institution: STANFORD UNIVERSITY STANFORD, CA

**Project Period:** 1995/09/15-2004/08/31

The objective of this proposal is to refine and test a mufti-component psychosocial behavioral intervention to reduce burden and depression among family caregivers of persons with Alzheimer's Disease or related disorders. This competing renewal will build on existing infrastructures and results obtained from its parent mufti-site feasibility study, Resources for Enhancing Alzheimer's Caregiver Health (REACH). REACH, (funded by the National Institute on Aging (NIA) and the National Institute for Nursing Research (NINR) U01-AG13305) explored the effectiveness of different interventions to reduce burden and distress of family caregivers in six participating sites. Detailed analyses of these data suggest specific components of the REACH interventions that may be efficacious in improving caregiver outcomes. The current study integrates identified components from the REACH interventions and tests a single mufticomponent intervention. This intervention will be evaluated among a sample of geographically and racially/ethnically diverse caregiver populations. The study design is a mufti-site, two-group randomized clinical trial. The same two conditions: an in-home mufti-component intervention or a standardized information only control condition will be implemented at five sites (Birmingham, Memphis, Miami, Palo Alto, and Philadelphia), with the Coordinating Center in Pittsburgh. Recruitment of 600 (120 per site) caregiver-care recipient dyads will yield 510 completing the protocol (15% attrition expected). Equal numbers of African Americans/Blacks, Hispanic/Latinos, and Caucasian/Whites will be recruited and assigned to each condition at each site. Phase 1 involves a refinement of the intervention and training of the interventionists across sites; in Phase 2, the randomized clinical trial will be conducted. The intervention is designed to enable caregivers to team and use cognitive and behavioral strategies, to impact both care recipient behaviors (e.g., wandering) and their own behaviors (e.g., managing stress). The intervention will consist of 10 home visits by trained staff plus 5 pre-planned contacts with trained staff through innovative technology over a six month period. The technology will also provide access to formal services, family, and other caregivers. A uniform battery of predictor and outcome measures will be collected at baseline, three and six months. Cost-effectiveness and clinical significance of the two conditions will also be evaluated.

**Grant:** 3U01AG013289-08S1

**Program Director:** STAHL, SIDNEY M.

**Principal Investigator:** GALLAGHER-THOMPSON, DOLORES E PHD CLINICAL PSYCHOLOGY

**Title:** Multisite Intervention Trial for Diverse Caregivers.

Institution: STANFORD UNIVERSITY STANFORD, CA

**Project Period:** 1995/09/15-2004/08/31

Abstract Text Not Available

**Grant:** 3U01AG013265-07S1

**Program Director:** STAHL, SIDNEY M.

Principal Investigator: GITLIN, LAURA N PHD

Title: Multisite Intervention Trial for Diverse Caregivers

Institution: THOMAS JEFFERSON UNIVERSITY PHILADELPHIA, PA

**Project Period**: 1996/09/30-2004/08/31

The objective of this proposal is to refine and test a multi-component psychosocial behavioral intervention to reduce burden and depression among family caregivers of persons with Alzheimer's Disease or related disorders. This competing renewal will build on existing infrastructures and results obtained from its parent multi-site feasibility study, Resources for Enhancing Alzheimer's Caregiver Health (REACH). REACH, (funded by the National Institute on Aging (NIA) and the National Institute for Nursing Research (NINR) U01-AG13305) explored the effectiveness of different interventions to reduce burden and distress of family caregivers in six participating sites. Detailed analyses of these data suggest specific components of the REACH interventions that may be efficacious in improving caregiver outcomes. The current study integrates identified components from the REACH interventions and tests a single multi-component intervention. This intervention will be evaluated among a sample of geographically and racially/ethnically diverse caregiver populations. The study design is a multi-site, two-group randomized clinical trial. The same two conditions: an in-home multi-component intervention or a standardized information only control condition will be implemented at five sites (Birmingham, Memphis, Miami, Palo Alto, and Philadelphia), with the Coordinating Center in Pittsburgh. Recruitment of 600 (120 per site) caregiver-care recipient dyads will yield 510 completing the protocol (15% attrition expected). Equal numbers of African Americans/Blacks, Hispanic/Latinos, and CaucasianMhites will be recruited and assigned to each condition at each site. Phase 1 involves a refinement of the intervention and training of the interventionists across sites; in Phase 2, the randomized clinical trial will be conducted. The intervention is designed to enable caregivers to learn and use cognitive and behavioral strategies, to impact both care recipient behaviors (e.g., wandering) and their own behaviors (e.g., managing stress). The intervention will consist of 10 home visits by trained staff plus 5 pre-planned contacts with trained staff through innovative technology over a six month period. The technology will also provide access to formal services, family, and other caregivers. A uniform battery of predictor and outcome measures will be collected at baseline, three and six months. Cost-effectiveness and clinical significance of the two conditions will also be evaluated.

**Grant:** 5U01AG013265-08

**Program Director:** STAHL, SIDNEY M.

Principal Investigator: GITLIN, LAURA N MA

Title: Multisite Intervention Trial for Diverse Caregivers

Institution: THOMAS JEFFERSON UNIVERSITY PHILADELPHIA, PA

**Project Period:** 1996/09/30-2004/08/31

The objective of this proposal is to refine and test a multi-component psychosocial behavioral intervention to reduce burden and depression among family caregivers of persons with Alzheimer's Disease or related disorders. This competing renewal will build on existing infrastructures and results obtained from its parent multi-site feasibility study, Resources for Enhancing Alzheimer's Caregiver Health (REACH). REACH, (funded by the National Institute on Aging (NIA) and the National Institute for Nursing Research (NINR) U01-AG13305) explored the effectiveness of different interventions to reduce burden and distress of family caregivers in six participating sites. Detailed analyses of these data suggest specific components of the REACH interventions that may be efficacious in improving caregiver outcomes. The current study integrates identified components from the REACH interventions and tests a single multi-component intervention. This intervention will be evaluated among a sample of geographically and racially/ethnically diverse caregiver populations. The study design is a multi-site, two-group randomized clinical trial. The same two conditions: an in-home multi-component intervention or a standardized information only control condition will be implemented at five sites (Birmingham, Memphis, Miami, Palo Alto, and Philadelphia), with the Coordinating Center in Pittsburgh. Recruitment of 600 (120 per site) caregiver-care recipient dyads will yield 510 completing the protocol (15% attrition expected). Equal numbers of African Americans/Blacks, Hispanic/Latinos, and CaucasianMhites will be recruited and assigned to each condition at each site. Phase 1 involves a refinement of the intervention and training of the interventionists across sites; in Phase 2, the randomized clinical trial will be conducted. The intervention is designed to enable caregivers to learn and use cognitive and behavioral strategies, to impact both care recipient behaviors (e.g., wandering) and their own behaviors (e.g., managing stress). The intervention will consist of 10 home visits by trained staff plus 5 pre-planned contacts with trained staff through innovative technology over a six month period. The technology will also provide access to formal services, family, and other caregivers. A uniform battery of predictor and outcome measures will be collected at baseline, three and six months. Cost-effectiveness and clinical significance of the two conditions will also be evaluated.

**Grant:** 2U01AG007198-16A1

**Program Director:** PATMIOS, GEORGEANNE

Principal Investigator: MANTON, KENNETH G PHD

**Title:** Functional and Health Changes of the Elderly

Institution: DUKE UNIVERSITY DURHAM, NC

**Project Period:** 1987/07/01-2005/09/30

REVISED DESCRIPTION (provided by applicant): It is proposed to conduct a 2004 National Long Term Care Survey (NLTCS) of the U.S. population aged 65+ to analyze trends in the population risks of chronic disability, severe cognitive impairment, and mortality. The disability and health sections of this survey will form a consistent time series comprised of the 1982, 1984, 1989, 1994, 1999 and now 2004 NLTCS. The 2004 NLTCS data will be released rapidly to other researchers.

**Grant:** 3U01AG007198-16A1S1

**Program Director:** PATMIOS, GEORGEANNE

Principal Investigator: MANTON, KENNETH G PHD SOCIOLOGY: HUMAN

ECOLOGY/DEMOGRAPHY

**Title:** Functional and Health Changes of the Elderly

Institution: DUKE UNIVERSITY DURHAM, NC

**Project Period:** 1987/07/01-2005/09/30

This supplement is provided by DHHS/ASPE. This supplement funds an Informal Caregivers' Survey (ICS) as part of the 2004 wave of the National Long Term Care Survey (NLTCS). The 2004 ICS will interview a primary informal caregiver for every sample member in the NLTCS who reports having a primary caregiver. In addition, the primary formal (i.e. paid) caregiver will be interviewed in the case of sample members who report relying exclusively on assistance from formal caregivers.

**Grant:** 2U01AG014276-06A1

**Program Director:** ELIAS, JEFFREY W.

Principal Investigator: MARSISKE, MICHAEL PHD

Title: ACTIVE Phase II: UF/WSU Field Site

**Institution:** UNIVERSITY OF FLORIDA GAINESVILLE, FL

**Project Period**: 1996/09/30-2005/12/31

DESCRIPTION (provided by applicant): This application is a renewal of the application titled "ACTIVE Phase U: UF/WSU Field Site". This application is for the Field Site at Detroit/Wayne State Univ. Phase I of ACTIVE (Advanced Cognitive Training for \_Independent and Vital Elderly) was a randomized controlled trial of three cognitive intervention arms, addressing the question of whether improving basic cognition aided in maintaining functional independence in elders. As to be reported in JAMA (11/12/02), Phase I found strong, broad and durable cognitive ability-specific training effects. The effect sizes were comparable to or greater than the amount of cognitive decline observed in other longitudinal studies, suggesting that the interventions have the potential to reverse age-related decline. There was minimal transfer of training effects to everyday activities (i.e., functional competence). However, it should be noted that through the two-year followup, there was no evidence of a significant decline in ADL and IADL status. Therefore, to adequately understand the cognitive transfer effects of the training interventions, a longer followup period is required, particularly to see whether there is a separation of the change trajectories for everyday activities of trained and untrained participants over time. Phase II of ACTIVE is proposed as a followup study focused on measuring the long-term impact of training effects on cognitive function and cognitively demanding everyday activities. The Phase II followup will consist of one assessment to include the Phase I post-test battery and a clinical assessment. The ACTIVE cohort (n = 2832) is a special sample, containing substantial oversampling of African American, socioeconomically poor, and very old adults. The Specific Aims of Phase II of ACTIVE are: 1) to determine whether the cognitive interventions (as initial treatment or as a consequence of repeated boosters) have long-term protective effects on functional outcomes; 2) to document any delayed transfer of the cognitive training to secondary outcomes," and 3) to identify individual factors that affect response to intervention. As in Phase I, the primary analytical approach to detecting treatment effects on both cognitive and functional abilities will be a repeated-measures, mixedeffects model incorporating all design features as fixed effects and individual-level variability as random effects. Other multivariate analyses including lagged and cross-lagged analyses of change using latent change analysis, structural equation modeling, and growth curve analyses will also be used as appropriate to characterize relationships between individual difference factors and change in functional competence. Retention is projected conservatively at 72% with 65% of the cohort providing full data and another 7% providing partial data at year 5. Power analysis shows that extending the study will make it possible to observe effect sizes on the order of 0.05-0.10 with excellent power, in the range of at least 80-90%.

**Grant:** 2U01AG014260-06A1

**Program Director:** ELIAS, JEFFREY W.

Principal Investigator: REBOK, GEORGE

Title: ACTIVE Phase II: JHU Field Site

Institution: JOHNS HOPKINS UNIVERSITY BALTIMORE, MD

**Project Period**: 1996/09/30-2005/12/31

DESCRIPTION (provided by applicant): This application is a renewal of the application titled "Trial of a Cognitive Intervention for Older Adults." This application is for the Field Site at Johns Hopkins University. Phase I of ACTIVE (Advanced Cognitive Training for Independent and Vital Elderly) was a randomized controlled trial of three cognitive intervention arms, addressing the question of whether improving basic cognition aided in maintaining functional independence in elders. As to be reported in JAMA (11112102), Phase I found strong, broad, and durable cognitive ability-specific training effects. The effect sizes were comparable to or greater than the amount of cognitive decline observed in other longitudinal studies, suggesting that the interventions have the potential to reverse age-related decline. There was minimal transfer of training effects to everyday activities (i.e., functional competence). However, it should be noted that through the two-year followup, there was no evidence of a significant decline in ADL and IADL status. Therefore, to adequately understand the cognitive transfer effects of the training interventions, a longer followup period is required, particularly to see whether there is a separation of the change trajectories for everyday activities of trained and untrained participants over time. Phase II of ACTIVE is proposed as a followup study focused on measuring the long-term impact of training effects on cognitive function and cognitively demanding everyday activities. The Phase II followup will consist of one assessment to include the Phase I post-test battery and a clinical assessment. The ACTIVE cohort (n = 2832) is a special sample, containing substantial oversampling of African American, socioeconomically poor, and very old adults. The Specific Aims of Phase II of ACTIVE are: 1) to determine whether the cognitive interventions (as initial treatment or as a consequence of repeated boosters) have long-term protective effects on functional outcomes; 2) to document any delayed transfer of the cognitive training to secondary outcomes; and 3) to identify individual factors that affect response to intervention. As in Phase I, the primary analytical approach to detecting treatment effects on both cognitive and functional abilities will be a repeated-measures, mixedeffects model incorporating all design features as fixed effects and individual-level variability as random effects. Other multivariate analyses including lagged and cross-lagged analyses of change using latent change analysis, structural equation modeling, and growth curve analyses will also be used as appropriate to characterize relationships between individual difference factors and change in functional competence. Retention is projected conservatively at 72% with 65% of the cohort providing full data and another 7% providing partial data at year 5. Power analysis shows that extending the study will make it possible to observe effect sizes on the order of 0.05-0.10 with excellent power, in the range of at least 80-90%.

**Grant:** 5U01AG013305-08

**Program Director:** STAHL, SIDNEY M.

Principal Investigator: SCHULZ, RICHARD PHD PSYCH ASPECT:SOC

PSYCH/ASPECTS-UNSPEC

Title: Coordinating Center for Caregiver Intervention Trial

Institution: UNIVERSITY OF PITTSBURGH AT PITTSBURGH PITTSBURGH, PA

**Project Period:** 1995/09/15-2004/08/31

DESCRIPTION (provided by applicant): The objective of this proposal is to refine and test a multicomponent psychosocial behavioral intervention to reduce burden and depression among family caregivers of persons with Alzheimer?s Disease or related disorders. This competing renewal will build on existing infrastructures and results obtained from its parent multi-site feasibility study, Resources for Enhancing Alzheimer?s Caregiver Health (REACH). REACH, (funded by the National Institute on Aging (NIA) and the National Institute for Nursing Research (NINR) U01-AG13305) explored the effectiveness of different interventions to reduce burden and distress of family caregivers in six participating sites. Detailed analyses of these data suggest specific components of the REACH interventions that may be efficacious in improving care-giver outcomes. The current study integrates identified components from the REACH interventions and tests a single multi-component intervention. This intervention will be evaluated among a sample of geographically and racially/ethnically diverse care-giver populations. The study design is a multi-site, twogroup randomized clinical trial. The same two conditions: an in-home multi-component intervention or a standardized information only control condition will be implemented at five sites (Birmingham, Memphis, Miami, Palo Alto, and Philadelphia), with the Coordinating Center in Pittsburgh. Recruitment of 600 (120 per site) caregiver-care recipient dyads will yield 510 completing the protocol (15% attrition expected). Equal numbers of African Americans/Blacks, Hispanics/Latinos, and Caucasian/Whites will be recruited and assigned to each condition at each site. Phase 1 involves a refinement of the intervention and training of the interventionists across sites; in Phase 2, the randomized clinical trial will be conducted. The intervention is designed to enable care givers to earn and use cognitive and behavioral strategies, to impact both care recipient behaviors (e.g., wandering) and their own behaviors (e.g., managing stress). The intervention will consist of 10 home visits by trained staff plus 5 preplanned contacts with trained staff through innovative technology over a six-month period. The technology will also provide access to formal services, family, and other caregivers. A uniform battery of predictor and outcome measures will be collected at baseline, three and six months. Cost effectiveness and clinical significance of the two conditions will also be evaluated.

**Grant:** 2U01AG014282-06A1

**Program Director:** ELIAS, JEFFREY W.

Principal Investigator: TENNSTEDT, SHARON L PHD

Title: ACTIVE Phase II: Coordinating Center

Institution: NEW ENGLAND RESEARCH INSTITUTES, INC. WATERTOWN, MA

**Project Period**: 1996/09/30-2005/12/31

DESCRIPTION (provided by applicant): This application is a renewal of the application titled "Trial of a Cognitive Intervention for Older Adults-CC". This application is for the Coordinating Center. Phase I of ACTIVE (Advanced Cognitive Training for Independent and Vital Elderly) was a randomized controlled trial of three cognitive intervention arms, addressing the question of whether improving basic cognition aided in maintaining functional independence in elders. As to be reported in JAMA (11/12/02), Phase I found strong, broad and durable cognitive ability-specific training effects. The effect sizes were comparable to or greater than the amount of cognitive decline observed in other longitudinal studies, suggesting that the interventions have the potential to reverse age-related decline. There was minimal transfer of training effects to everyday activities (i.e., functional competence). However, it should be noted that through the two-year followup, there was no evidence of a significant decline in ADL and IADL status. Therefore, to adequately understand the cognitive transfer effects of the training interventions requires a longer followup period, particularly to see whether there is a separation of the change trajectories for everyday activities of trained and untrained participants over time. Phase II of ACTIVE is proposed as a followup study focused on measuring the long-term impact of training effects on cognitive function and cognitively demanding everyday activities. The Phase II followup will consist of one assessment to include the Phase I post-test battery and a clinical assessment. The ACTIVE cohort (n = 2832) is a special sample, containing substantial oversampling of African American, socioeconomically poor, and very old adults. The Specific Aims of Phase II of ACTIVE are: 1) to determine whether the cognitive interventions (as initial treatment or as a consequence of repeated boosters) have long-term protective effects on functional outcomes; 2) to document any delayed transfer of the cognitive training to secondary outcomes; and 3) to identify individual factors that affect response to intervention. As in Phase I, the primary analytical approach to detecting treatment effects on both cognitive and functional abilities will be a repeated-measures, mixed-effects model incorporating all design features as fixed effects and individual-level variability as random effects. Other multivariate analyses including lagged and cross-lagged analyses of change using latent change analysis, structural equation modeling, and growth curve analyses will also be used as appropriate to characterize relationships between individual difference factors and change in functional competence. Retention is projected conservatively at 72% with 65% of the cohort providing full data and another 7% providing partial data at year 5. Power analysis shows that extending the study will make it possible to observe effect sizes on the order of 0.05-0.10 with excellent power, in the range of at least 80-90%.

**Grant:** 5U01AG009740-14

**Program Director:** SUZMAN, RICHARD S.

Principal Investigator: WILLIS, ROBERT J PHD SOC SC/REL

DI:ECONOMICS, OTHER

Title: HEALTH AND RETIREMENT STUDY

Institution: UNIVERSITY OF MICHIGAN AT ANN ARBOR ANN ARBOR, MI

**Project Period:** 1990/09/25-2005/12/31

This application is to design and field the Health and Retirement Study (HRS) and the study of Asset and Health Dynamics Among the Oldest Old (AHEAD) for a six-year period (2000-2005). In 1998, the HRS and AHEAD studies were merged and added two new birth cohorts. The combined study is referred to as the Health and Retirement Study. The HRS was designed to provide a uniquely rich longitudinal dataset for the community of scientific and policy researchers who study the health, economics and demography of aging. The design and execution of the survey has involved the active participation of a large number of scientists from a broad array of disciplines. HRS has evolved considerably from its inception, guided by input from its Steering and Data Monitoring Committees, the broader research community, and scientific review panels that have evaluated earlier proposals. HRS is currently comprised o four birth cohorts: persons born in 1931-41 and their spouses (HRS original cohort); persons born before 1924 and their spouses (AHEAD cohort); and, persons born in 1942-47 ("War Babies") and 1924-30 ("Children of the Depression") and their spouses who were not already included in the original HRS or AHEAD cohorts. We plan to add a new 6-year cohort of Americans entering their 50's in 2004, and every sixth year thereafter. Respondents are followed longitudinally at two-year intervals until they die. In addition to the core biennial interviews, we plan to continue the development of complementary data sources from employer pension plans and from linked administrative data, including Social Security and Medicare records. We will also explore possible linkages associated with geocoding, and employer and nursing home characteristics, as associated with our sample members. In sum, our goals for this period are: I) Continue data collection on the original HRS and AHEAD cohorts; 2) Collect longitudinal data on the new cohorts introduced in 1998; 3) Begin baseline data collection on the "Early Boomer" cohort of 1948-53 in 2004; 4) Continue developing complementary data sources; 5) Enhance data quality; 6) Enhance data distribution and dissemination; 7) Expand outreach activities; and, 8) Continue to innovate content and survey methodology.

**Grant:** 3U01AG009740-14S1

**Program Director:** SUZMAN, RICHARD S.

Principal Investigator: WILLIS, ROBERT J PHD

Title: Diabetes Mail Survey: Supplement to the HRS

Institution: UNIVERSITY OF MICHIGAN AT ANN ARBOR ANN ARBOR, MI

**Project Period:** 1998/01/01-2005/12/31

DESCRIPTION (provided by applicant): This proposed supplement to the Health and Retirement Study (HRS) will collect additional information from HRS participants that will support detailed analyses of diabetes self-management and glycemic control. The mail survey will include a self-administered questionnaire, and a kit for taking a dried blood spot sample that can be returned (anonymously) to a laboratory to be tested for levels of hemoglobin Alc. The combination of data collected in this mail survey and the ongoing longitudinal data in the core HRS will provide a uniquely valuable resource to study behavioral aspects of diabetes in relation to measured levels of glucose control and to long-term retrospective and prospective information on SES, health, family relations, and use of formal and informal care. The supplement itself will conduct analyses on the economic burden of diabetes, on disparities in self-management success, and on the effects of the mail survey on subsequent participation in the HRS. Approximately 2,150 self-reported diabetics from the HRS 2002 wave will be invited to participate. Participants will be asked in a 30-45 minute instrument questions about duration and severity of the disease, quality of health care received, medication use, selfmanagement behaviors, attitudes, self-efficacy, perceived barriers, and beliefs about their health risks. Participants who provide dried blood spot samples will be notified of the results of that assessment via mail. A Medical Review Board will oversee the notification process and determine if special instructions are required for any respondent. The survey data from this project will be released to the public as soon as it can be prepared and evaluated.

**Grant:** 3U01AG009740-14S2

**Program Director:** SUZMAN, RICHARD S.

Principal Investigator: WILLIS, ROBERT J PHD SOC SC/REL

DI:ECONOMICS, OTHER

Title: HEALTH AND RETIREMENT STUDY

Institution: UNIVERSITY OF MICHIGAN AT ANN ARBOR ANN ARBOR, MI

**Project Period:** 1990/09/25-2005/12/31

Abstract Text Not Available

**Grant:** 2U01AG014263-06A1

**Program Director:** ELIAS, JEFFREY W.

Principal Investigator: WILLIS, SHERRY L PHD

Title: ACTIVE Phase II: PSU Field Site

Institution: PENNSYLVANIA STATE UNIVERSITY-UNIV UNIVERSITY PARK, PA

**PARK** 

**Project Period:** 1997/08/15-2005/12/31

DESCRIPTION (provided by applicant): This application is a renewal of the application titled ACTIVE Phase II: PSU Field Site. This application is for the Field Site at The Pennsylvania State University. Phase I of ACTIVE (Advanced Cognitive Training for Independent and Vital Elderly) was a randomized controlled trial of three cognitive intervention arms, addressing the question of whether improving basic cognition aided in maintaining functional independence in elders. Phase One found strong, broad and durable cognitive abilityspecific training effects but minimal transfer to everyday activities (i.e., functional competence). Through the two-year followup, there was no evidence of a significant decline in ADL and IADL status. To adequately understand the cognitive transfer effects of the training interventions requires a longer followup period, particularly to see whether there is a separation of the change trajectories for everyday activities of trained and untrained participants over time. Phase II of ACTIVE is proposed as a followup study focused on measuring the longterm impact of training effects on cognitive function and cognitively demanding everyday activities. The Phase II followup will consist of one assessment to include the Phase I post-test battery and a clinical assessment. The ACTIVE cohort (n = 2832) is a special sample, containing substantial oversampling of African American, socioeconomically poor, and very old adults. The Specific Aims of Phase II of ACTIVE are: 1) to determine whether the cognitive interventions (as initial treatment or as a consequence of repeated boosters) have long-term protective effects on functional outcomes; 2) to document any delayed transfer of the cognitive training to secondary outcomes; and 3) to identify individual factors that affect response to intervention. As in Phase I, the primary analytical approach to detecting treatment effects on both cognitive and functional abilities will be a repeated-measures, mixed-effects model incorporating all design features as fixed effects and individual-level variability as random effects. Other multivariate analyses including lagged and cross-lagged analyses of change using latent change analysis, structuralmodeling, and growth curve analyses will also be used as appropriate to characterize relationships between individual difference factors and change in functional competence. Retention is projected conservatively at 72% with 65% of the cohort providing full data and another 7% providing partial data at year 5. Power analysis shows that extending the study will make it possible to observe effect sizes on the order of 0.05-0.10 with excellent power, in the range of at least 80-90%.